Water Application User Manual
Monitoring Module

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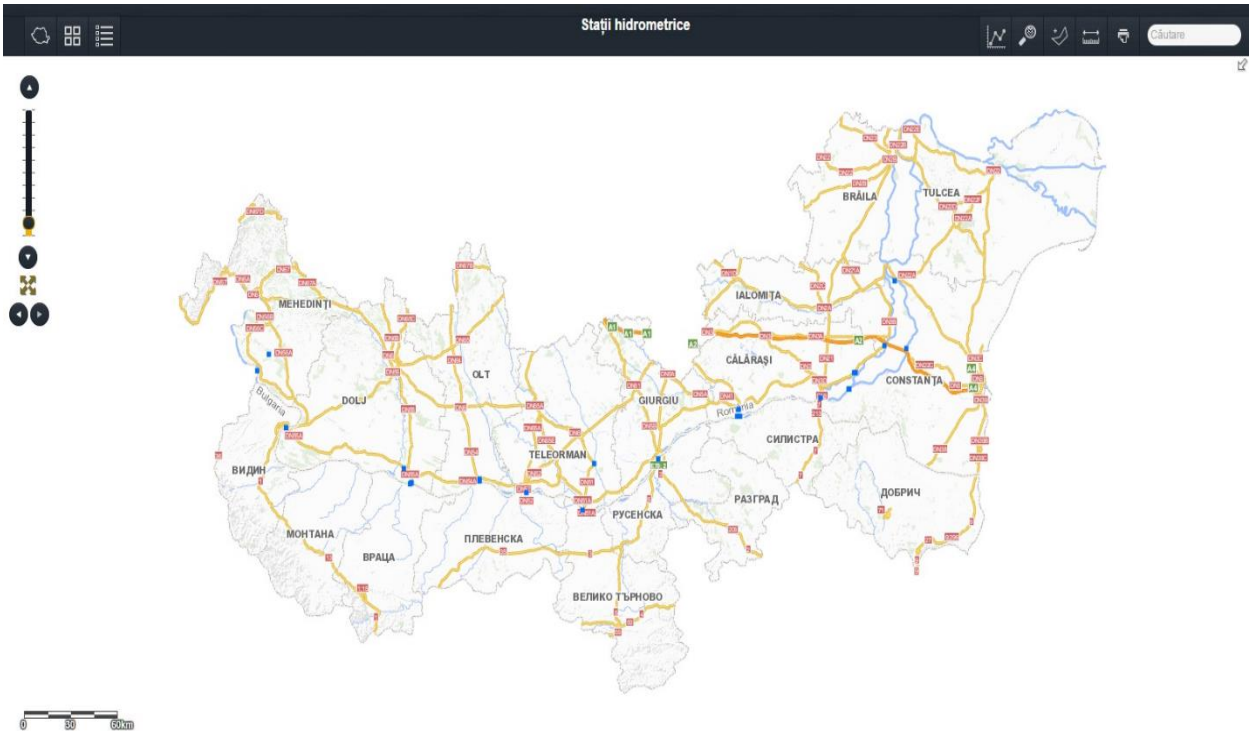
Introduction

This manual is intended for SII-WATER operators.

The instructions on how to use the system's functionalities in the monitoring module are detailed hereafter.

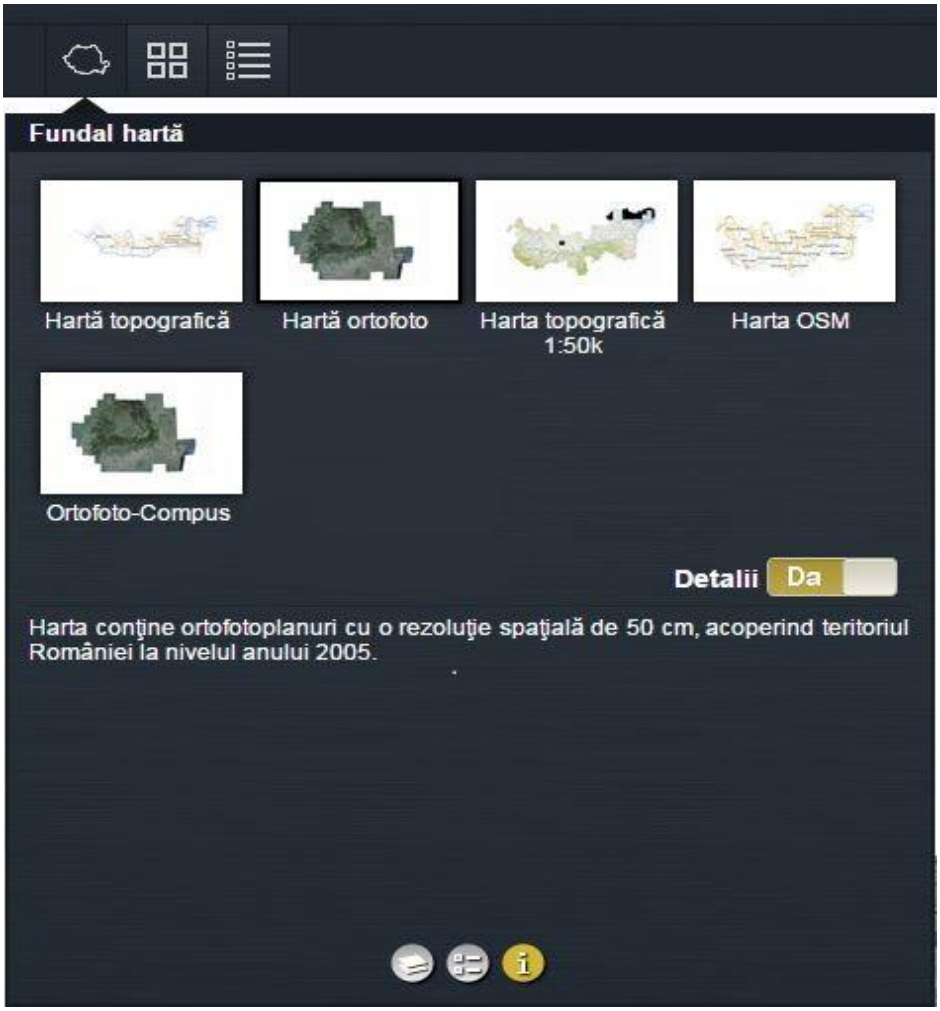
1. Dashboard

When accessing the application, the system displays the following screen:



2. Viewing and selecting background maps

To be able to view the background on the map, access the option located in the upper left of the screen, then choose the desired type of map.



If the option <DA> (Yes) is selected in the Detalii (Details) field, the user can choose to view one of the following sections:

- Services
- Caption
- Description

2.1 Viewing the services available for the selected background map

In this section the user can choose one of the services available for the selected background map. The section is available for certain maps only.

To access this functionality, access the “Services” button as shown in the image below:

2.2 Viewing the caption of the selected background map

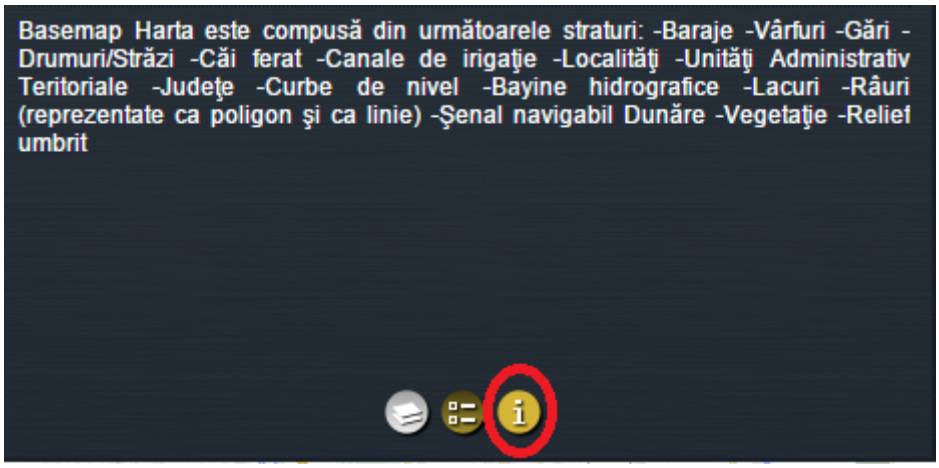
In this section the user can view the caption of the primary map, which is updated depending on the zoom level selected for viewing it.

To view the caption of the background map, access the “Caption” button as shown in the image below:

2.3 Viewing the description of the selected background map

In this section the user can view details on the selected background map.

To view the description of a background map, access the “Description” button as shown in the image below:

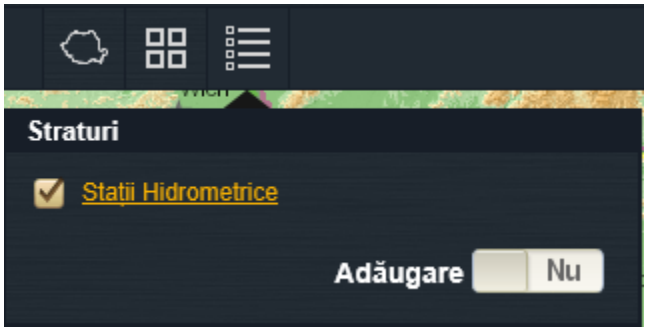

Basemap Harta este compusă din următoarele straturi: -Baraje -Vârfuri -Gări -Drumuri/Străzi -Căi ferat -Canale de irigaţie -Localităţi -Unităţi Administrativ Teritoriale -Judeţe -Curbe de nivel -Bayine hidrografice -Lacuri -Râuri (reprezentate ca poligon şi ca linie) -Şenal navigabil Dunăre -Vegetaţie -Relief umbrit

3. Viewing and selecting the themes

To change the theme on the map, access the option located in the upper left of the screen:

4. Viewing and selecting the layers

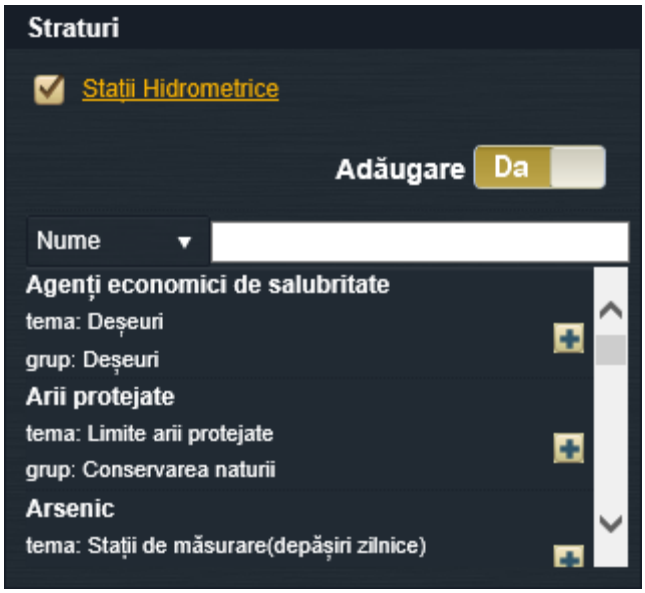
To change the layers displayed on the map, access the option in the upper left of the screen:



The system allows the user to select the layers displayed on the map among the layers available for the current theme. There are also mutually exclusive groups of layers, and when selecting a layer in a group, all the other layers in the same group are deselected.

4.1 Adding additional layers

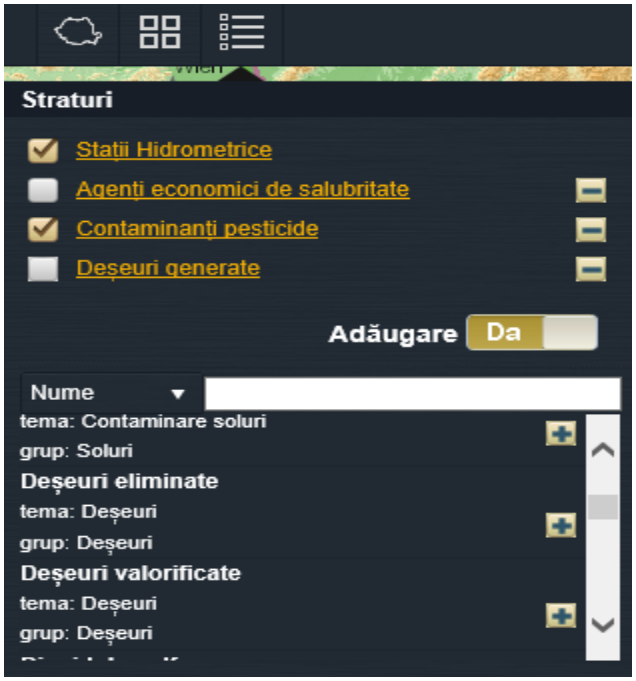
If you want to add a new layer, select the option <DA> (Yest) in the field <Adaugare> (Add), then select the button next to the selected layer:



The additional layers will be added automatically on the map.

4.2 Removing additional layers

If you want to remove a layer from the map, but not from the list, deselect it:

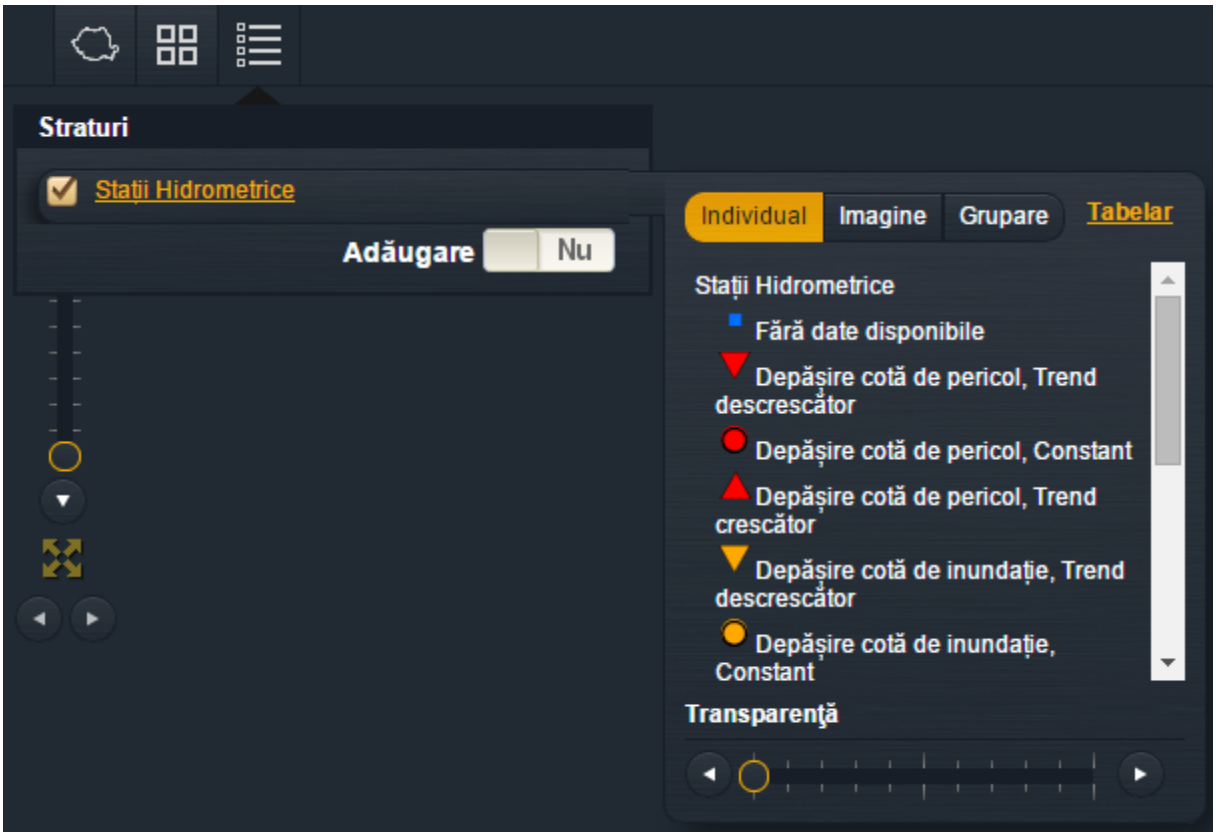


Deselected layers will be cleared from the map.

If you want to remove a layer from the newly created list, you must select the button next to the layer.

4.3 Viewing the caption of a layer

If you want to view the caption of a layer, access the respective layer in the list and its caption will be displayed.


Straturi
Stații Hidrometrice
Adăugare
Nu
Individual
Imagine
Grupare
Tabelar
Stații Hidrometrice
Fără date disponibile
Depășire cotă de pericol, Trend descrescător
Depășire cotă de pericol, Constant
Depășire cotă de pericol, Trend crescător
Depășire cotă de inundație, Trend descrescător
Depășire cotă de inundație, Constant
Transparență

5. Configuring the layer display mode

5.1 Select the objective display mode

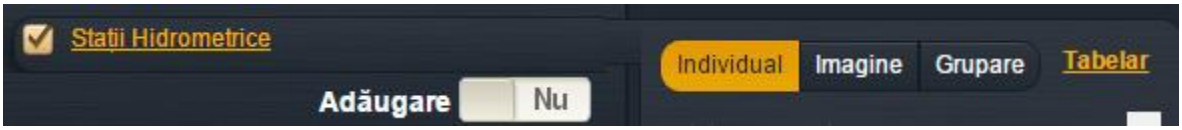
The system allows the user to select the way objectives are displayed in a layer. Usually there are three display modes:

- Individual - you can select each objective from the respective layer in order to display its details;

- Imagine (Image) - all the objectives in a layer, together with the primary map, form a unitary image in order to allow you to upload the information more rapidly;

- Grupare (Grouping) - the objectives in a layer are grouped together (their number in an area is displayed) depending on the zoom level.

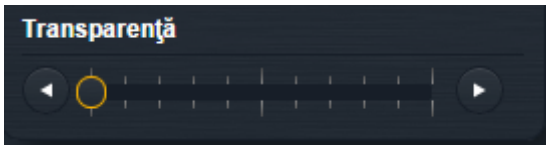
Depending on the objective geometry, some display modes are not available.



5.2 Selecting the level of transparency

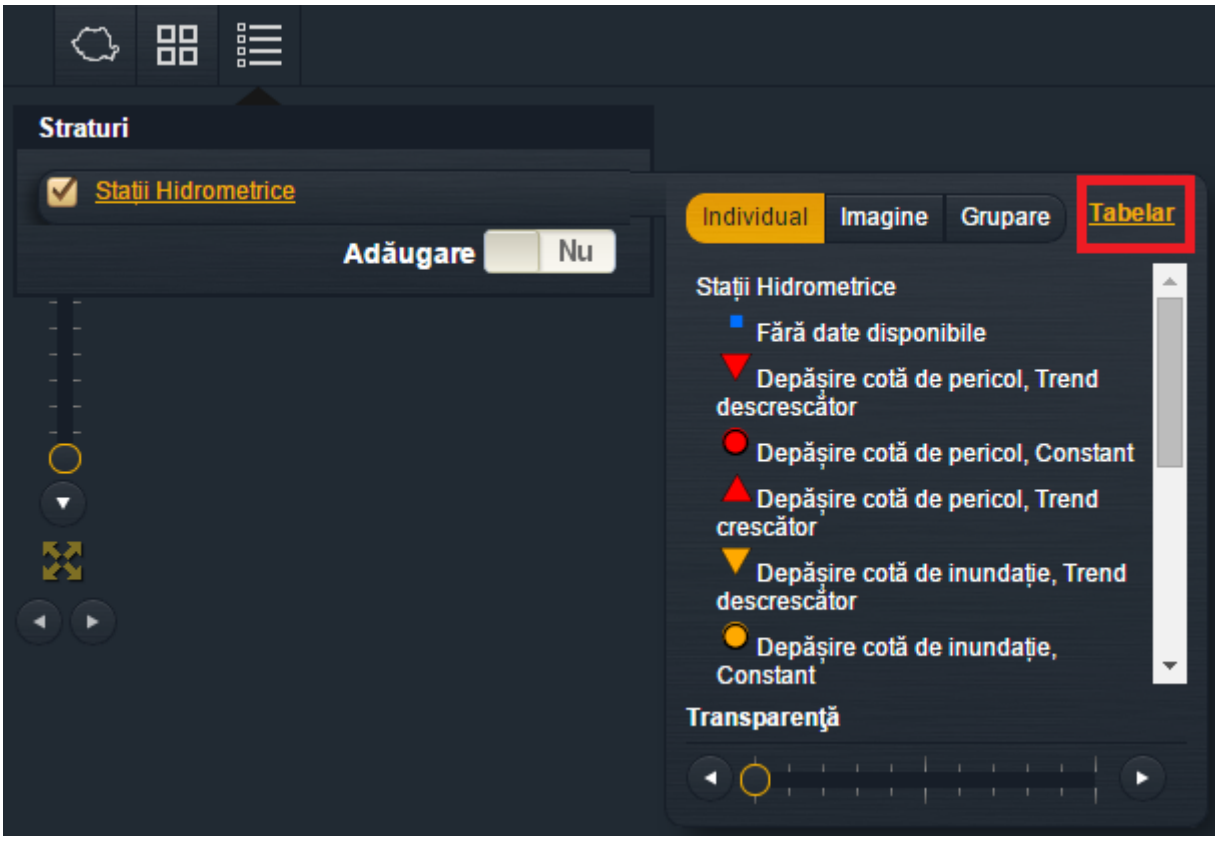
The system displays the list of available layers applicable over a background map. The transparency control is used to:

- increase the level of transparency
- decrease the level of transparency



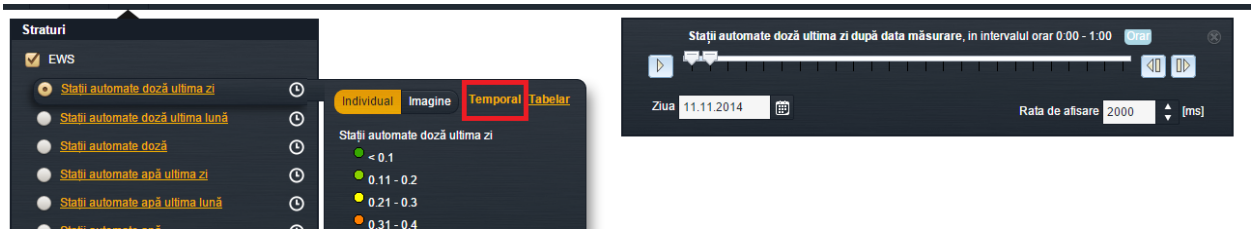
5.3 Viewing the objectives in tabular mode

The system allows the user to view the objectives of a layer in tabular mode, by accessing the “Tabelar” (Tabular) button, as shown in the image below.



5.4 Viewing the objectives in temporal mode

The system allows the user to view the objectives of a layer in temporal mode, by accessing the “Temporal” button, as shown in the image below.



6. Managing the objectives in tabular mode

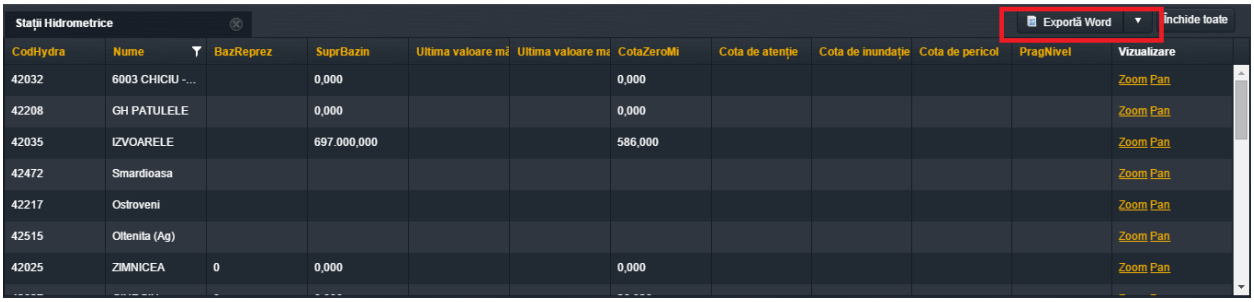
6.1 Filtering the list of a layer's objective details

The system allows you to filter the details displayed in tabular mode, by pressing the filter button available in certain columns of attributes. You can apply a simultaneous filter by several columns of attributes. Each column allows you to filter the attributes:

- by a criterion - you need to enter a specific filtering condition,
- by two criteria - two specific filtering conditions must be met.

6.2 Exporting a table of objectives

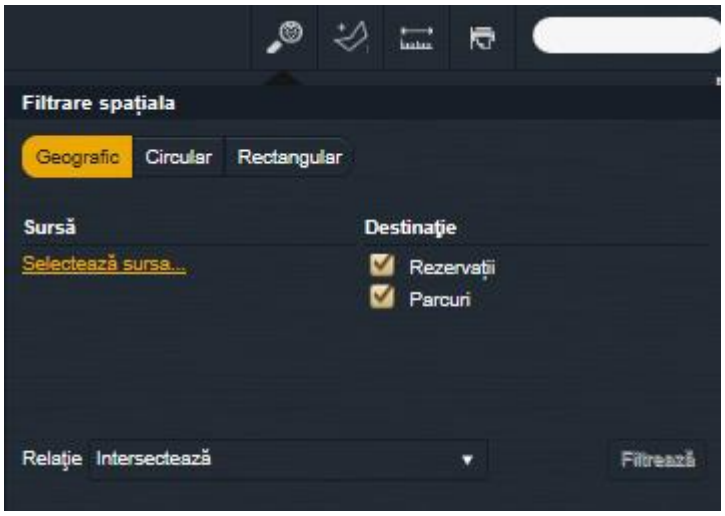
The application allows you to export the table of objectives in several formats: Word, Excel, PDF, .zip (Shapefile). You can export the table after applying filters also.



7. Spatial filtering

In case you want to apply a spatial filter, you need to select in the upper right of the screen, then select the desired filter mode:

- Geografic (Geographic)
- Circular
- Rectangular



7.1 The geographic mode

In case the spatial filter is applied geographically, the user can change the following fields as needed:

- Sursă (Source): this field allows you to select the source;
- Destinație (Destination): this field allows you to choose the desired destination;
- Relație (Relation): this field allows you to choose the relation between the data displayed.

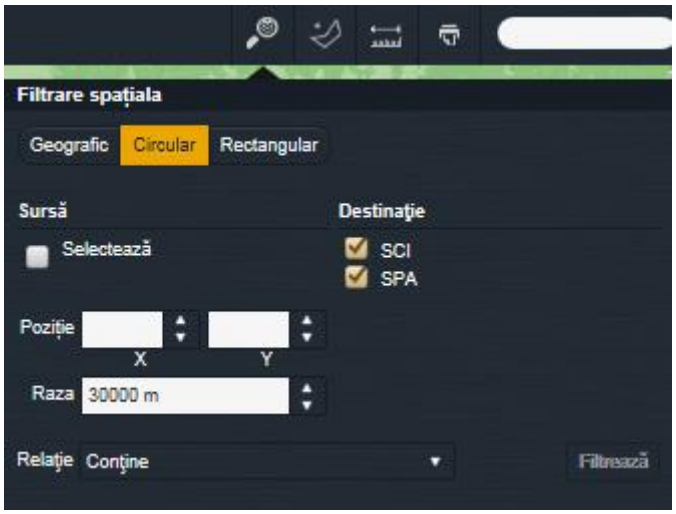
The geographic filtering screen is as follows:

7.2 The circular mode

In case the spatial filter is applied circularly, the user can change the following fields as needed:

- Selectează (Select): if this check box is selected, the user can use the cursor to choose a point on the map, the X and Y positions being automatically filled in depending on the selected coordinates;
- Destinație (Destination): this field allows you to choose the desired destination;
- Poziție (Position): in case the <Selecteaza> (Select) box is not selected, the fields Poziție X (X position) and Poziție Y (Y position) will be filled in manually;
- Rază (Radius): enter the radius that the filter will be applied on in this field;
- Relație (Relation): this field allows you to choose the relation between the data displayed.

The circular filtering screen is as follows:



7.3 The rectangular mode

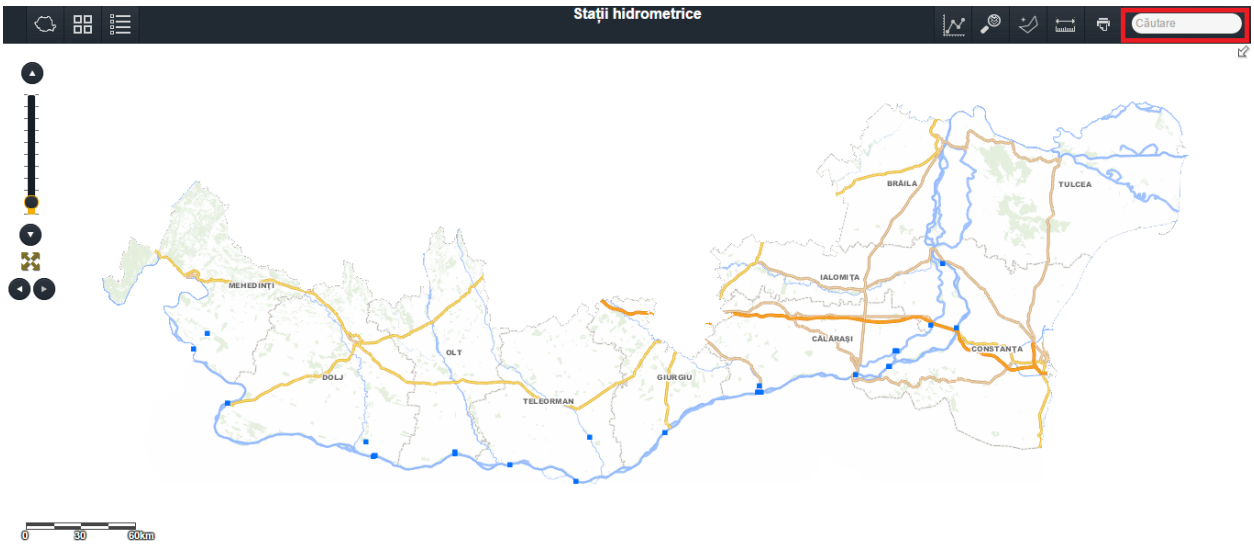
In case the spatial filter is applied rectangularly, the user can change the following fields as needed:

- Selectează (Select): if this check box is selected, the user can use the cursor to choose a point on the map, the X Min, Y Min, X Max and Y Max positions being automatically filled in depending on the selected coordinates;
- Destinație (Destination): this field allows you to choose the desired destination;
- Poziție (Position): in case the <Selecteaza> (Select) box is not selected, the Poziție (Position) fields X Min, Y Min, X Max and Y Max will be filled in manually;
- Relație (Relation): this field allows you to choose the relation between the data displayed.

The rectangular filtering screen is as follows:

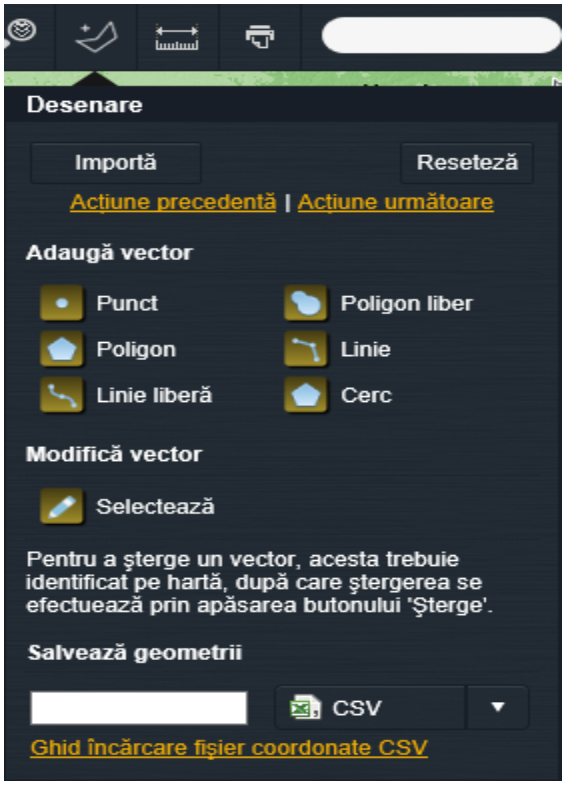
7.3 Search function

This functionality allows the user to search for localities or objectives located on the map. The user must enter the field in the upper right corner of the page.



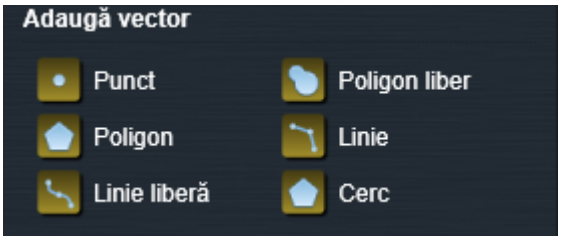
8. Drawing rough guide marks on the map

In case you want to change the map by drawing on it, you must select the option in the upper right corner of the screen:



8.1 Adding a geometry

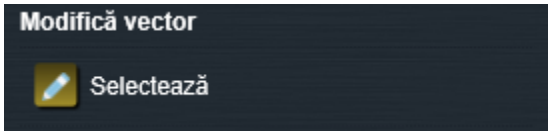
To add a drawing on the map, select an option from the ones below:



.

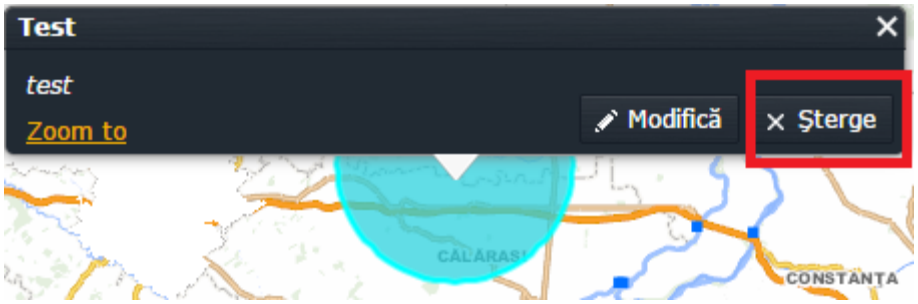
8.2 Changing the geometry

To change a drawing on the map, select the button:



8.3 Delete a geometry

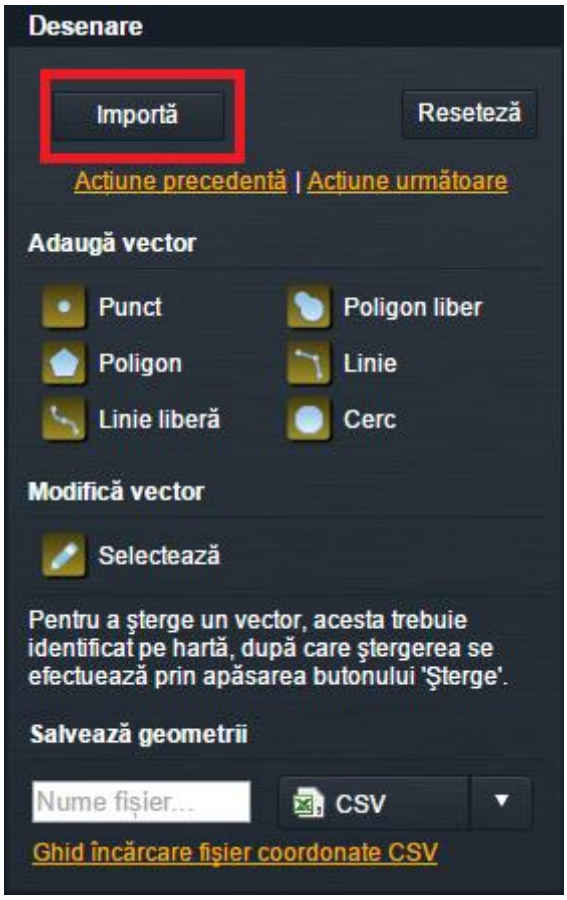
To delete a geometry, identify it on the map, then delete it by pressing the button Șterge (Delete).



9.4 Importing geometries

The system allows you to import a geometry on the map. The formats compatible for import are:

- .csv
- .zip(shape file)
- .kml
- .gml

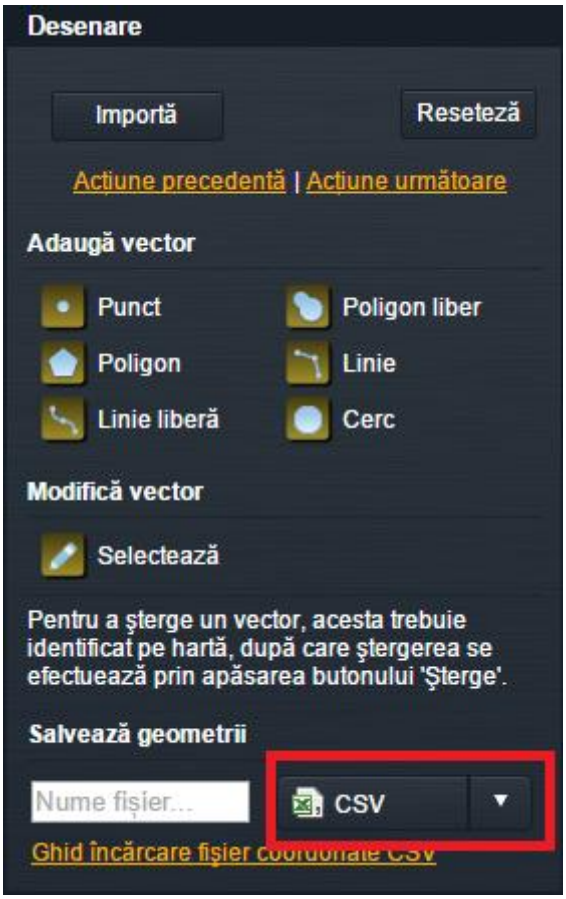


8.4 Exporting geometries

The system allows you to export the geometries drawn on the map in a compatible file.

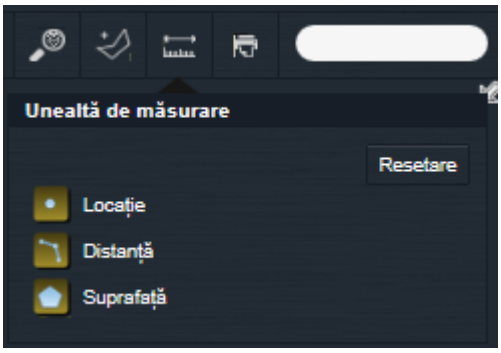
The compatible files are:

- .csv
- .zip(shape file)
- .kml
- .gml


Desenare
Importă
Reseteză
Acțiune precedentă | Acțiune următoare
Adaugă vector
Punct
Poligon liber
Poligon
Linie
Linie liberă
Cerc
Modifică vector
Selectează
Pentru a şterge un vector, acesta trebuie identificat pe hartă, după care ştergerea se efectuează prin apăsarea butonului 'Şterge'.
Salvează geometrii
Nume fişier...
CSV
Ghid încărcare fişier coordonate CSV

9. Performing geographic measurements

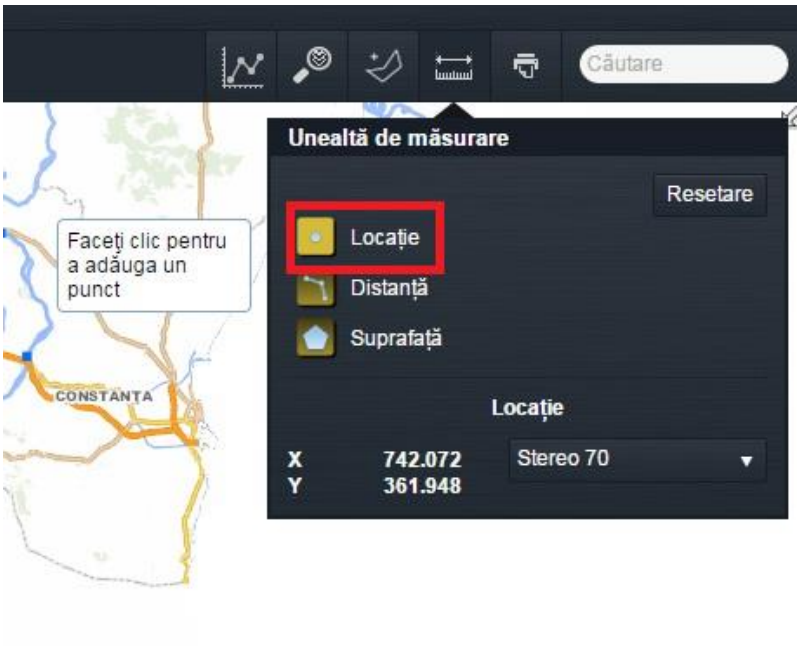
In case you want to change the measurement parameters on the map, access the option "Unealtă de măsurare" (Measurement tool) in the upper right corner of the screen:



9.1 Measuring the location coordinates

In this screen the user can select the format to view the location coordinates:

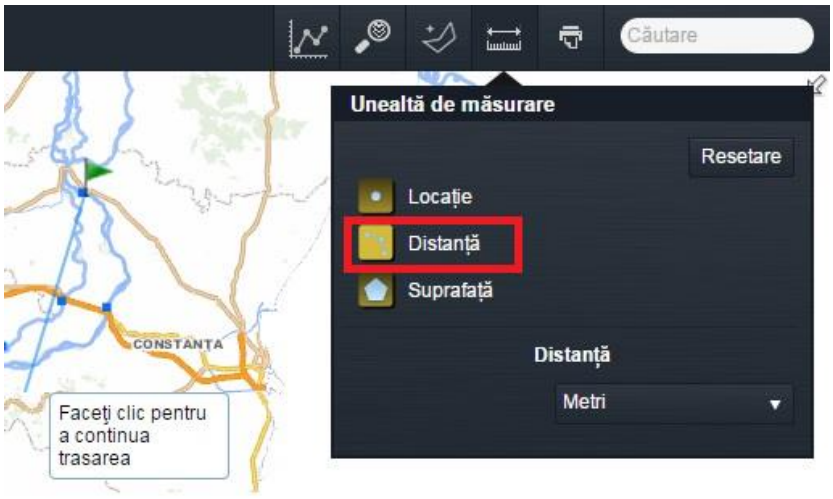
- Stereo 70: X and Y coordinates, or
- WGS 84: longitude and latitude coordinates.



9.2 Measuring the distance

In this screen the user can select the measurement unit for the distance:

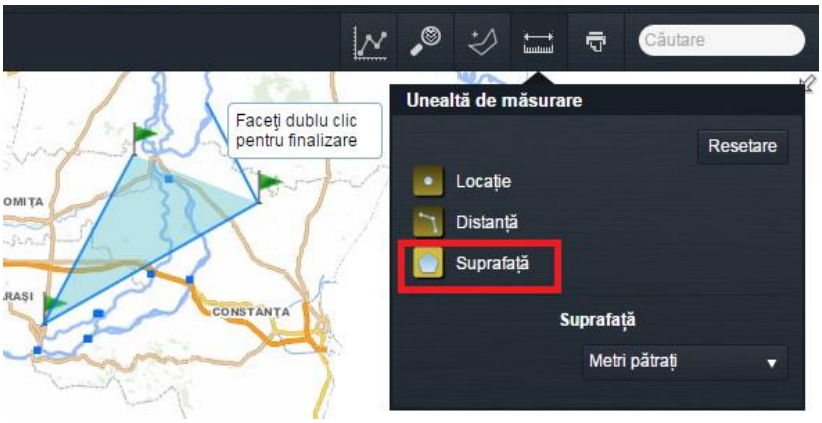
- Metri (Meters), or
- Kilometri (Kilometers).



9.3 Measuring the surface

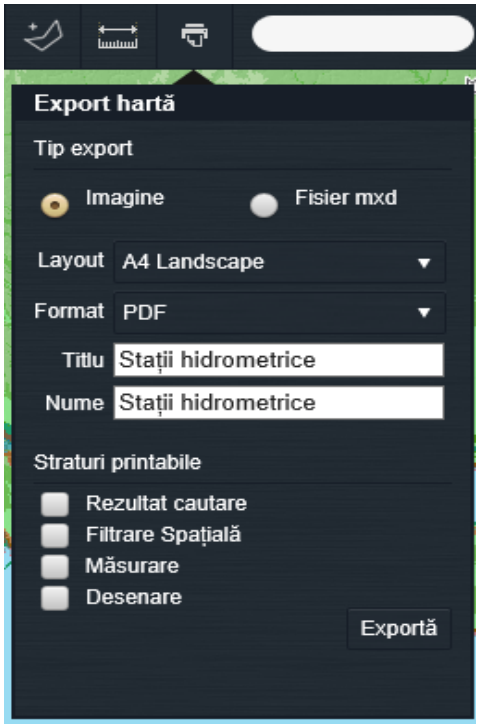
In this screen the user can select the measurement unit for the surface:

- Metri pătrați (Square meters),
- Kilometri pătrați (Square kilometers),
- Hectare (Hectares), or
- Ari (Ares).



10. Exporing the map

In case you want to export the map, you must select the option available in the upper right corner of the screen:



In this screen the user can select:

- Tip export (Type of export): choose whether the export will be made as Imagine (Image) or as .mxd file;
- Layout: choose the export format from the list;
- Format: choose the type of the exported document from the list;
- Titlu (Title): add a title for the exported map;
- Nume (Name): choose a name for the exported map;
- Straturi printabile (Printable layers): select the layers you want in the list.

Select the option

and the document will be saved following the path indicated by the user.

11. Interacting with the map

If you want to change the map size, go to the upper left corner of the screen where the following options are located:

11.1 Using the zoom tool on the map

11.1.1 Zoom in

To enlarge the image, you have three options:

- Click the option until the map reaches to the desired size;
- Use the option and raise it until the map reaches to the desired size;
- Use the scroll button of the mouse.

11.1.2 Zoom out

To reduce the image, you have three options:

- Click the option until the map reaches to the desired size;
- Use the option and lower it until the map reaches to the desired size;
- Use the scroll button of the mouse.

11.1.3 Previous zoom

In case you want to bring the map back to its previous size, you must select the option .

11.1.4 Next zoom

In case you want to bring the map to its next size, you must select the option .

11.2 Viewing the entire map

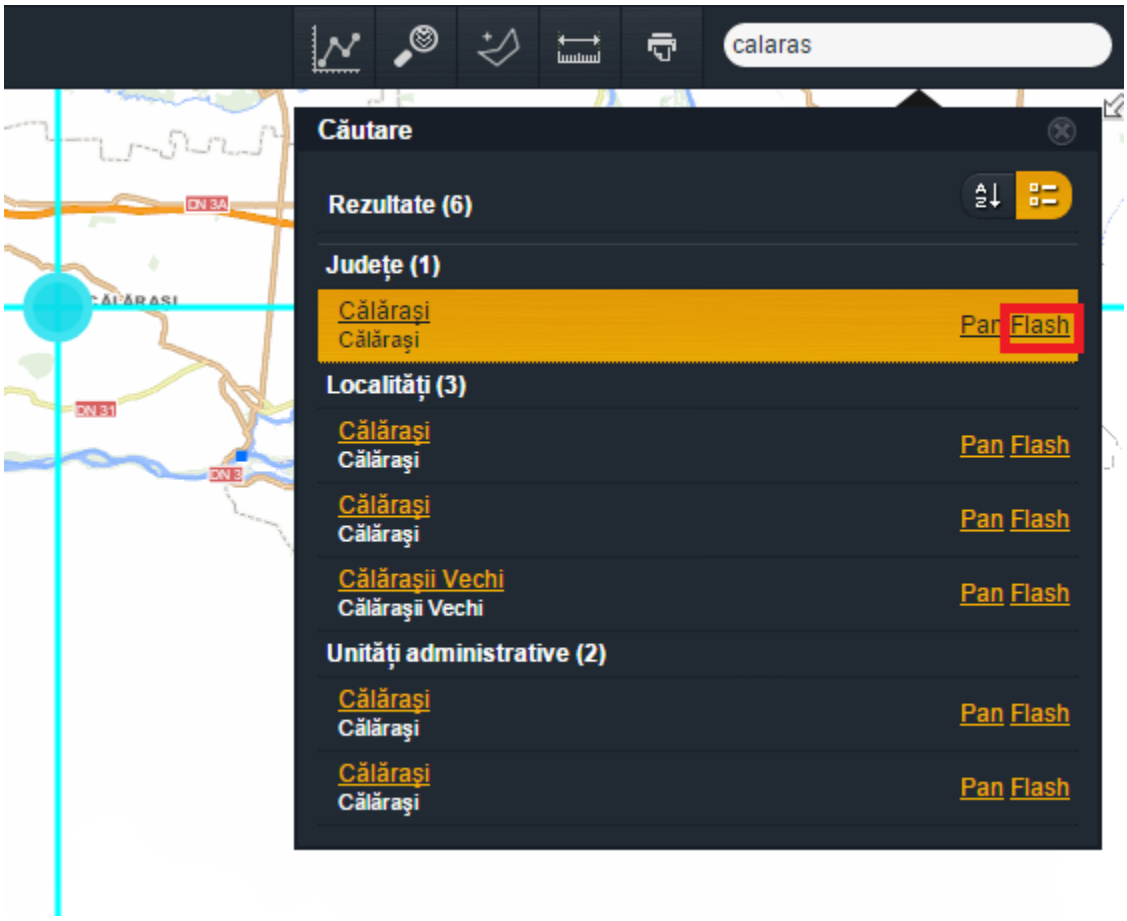
In case you want to bring the map to its initial size, you must select the option .

11.3 Using the pan tool on the map

The application allows the user to use a series of tools on the map in order to highlight one or several objectives in relation to other objectives. The “Pan” tool is used to center an objective on the map.

11.4 Using the flash tool on the map

The application allows the user to use a series of tools on the map in order to highlight one or several objectives in relation to other objectives. The “Flash” tool is used to indicate an objective on the map.


calaras
Căutare
Rezultate (6)
Județe (1)
Călărași
Călărași
Pan Flash
Localități (3)
Călărași
Călărași
Pan Flash
Călărași
Călărași
Pan Flash
Călărașii Vechi
Călărașii Vechi
Pan Flash
Unități administrative (2)
Călărași
Călărași
Pan Flash
Călărași
Călărași
Pan Flash
DN 3A
DN 31
DN 3

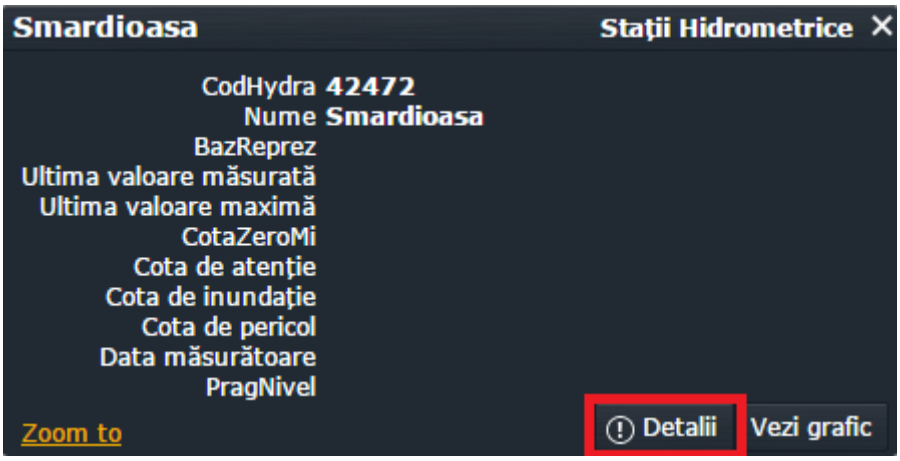
12. Viewing the objectives

12.1 Viewing an objective's summary of details

The application allows you to view a summary of an objective's details. If you want to view a summary of the objectives, select the respective objective and a window will be displayed, as shown below:

12.1 Viewing the details of an objective

The application allows you to view all the details of an objective, by pressing the “Detalii” (Details) button in the window displayed.

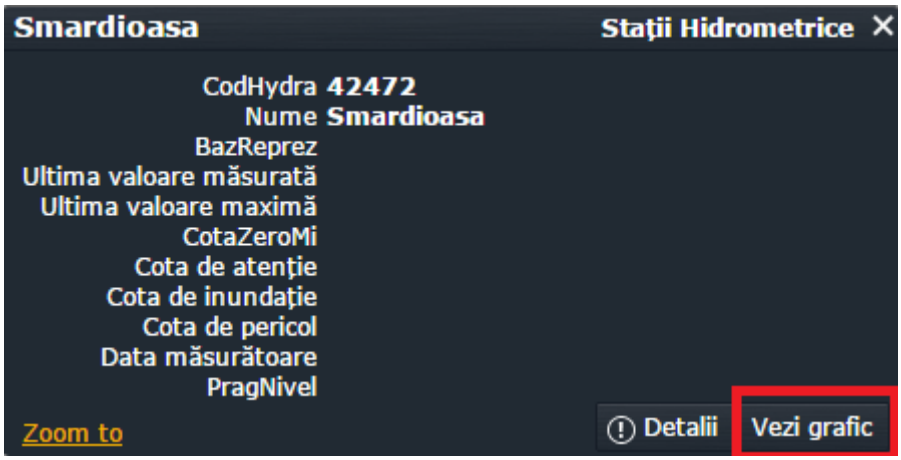


12.3 Viewing graphs

Viewing the graph corresponding to an objective means viewing all the values, depending on the time to take the data, in the form of a graph.

Depending on the specific graph, the user has the possibility to subsequently choose the period of time when he/she wants to view it and to set the time step to an interval of 1 hour, 6 hours or 1 day.

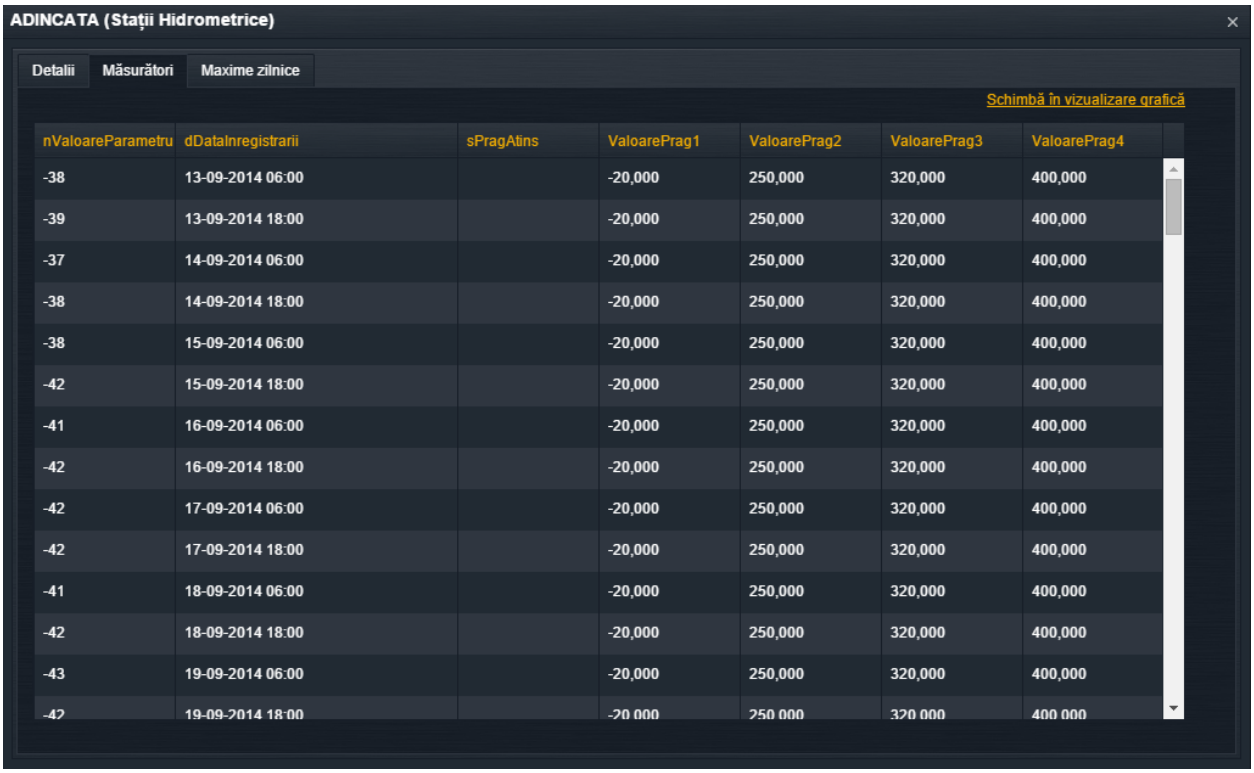
To view the graph, the user has to access the “Vezi grafic” (See graph) button in the window displayed, as shown in the image below:



12.4 Viewing the graphs in tabular mode

Viewing the graph in tabular mode means viewing all the values on the graph, depending on the time to take the data, in the form of a table.

To view the table, access the “Detalii” (Details) button in the new window displayed, select the “Măsurători” (Measurements) tab, then access the option “Schimbă în vizualizare tabelară” (Change to table view).

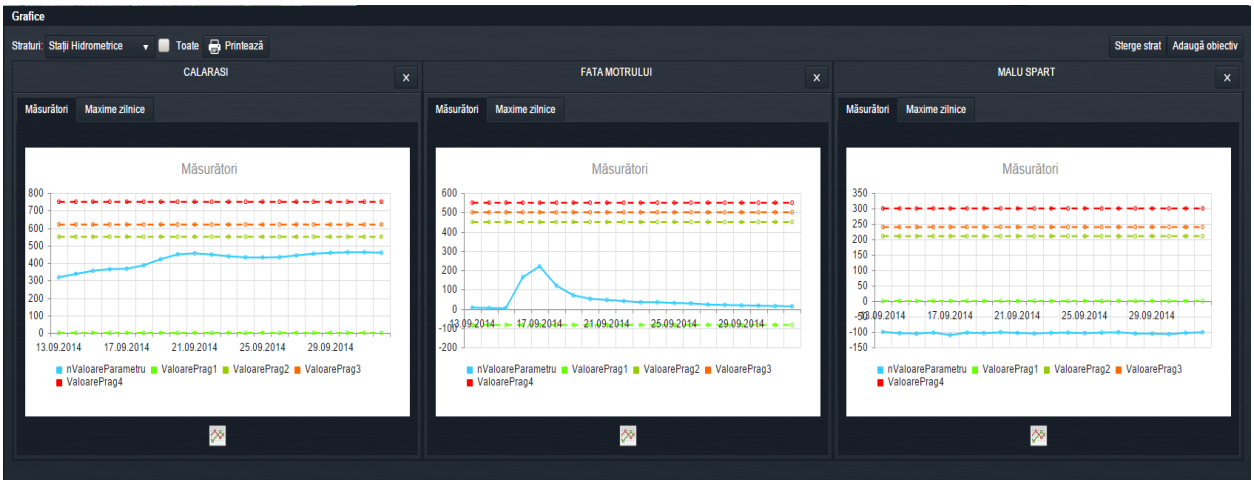


nValoareParametru	dDataInregistrarii	sPragAtins	ValoarePrag1	ValoarePrag2	ValoarePrag3	ValoarePrag4
-38	13-09-2014 06:00		-20,000	250,000	320,000	400,000
-39	13-09-2014 18:00		-20,000	250,000	320,000	400,000
-37	14-09-2014 06:00		-20,000	250,000	320,000	400,000
-38	14-09-2014 18:00		-20,000	250,000	320,000	400,000
-38	15-09-2014 06:00		-20,000	250,000	320,000	400,000
-42	15-09-2014 18:00		-20,000	250,000	320,000	400,000
-41	16-09-2014 06:00		-20,000	250,000	320,000	400,000
-42	16-09-2014 18:00		-20,000	250,000	320,000	400,000
-42	17-09-2014 06:00		-20,000	250,000	320,000	400,000
-42	17-09-2014 18:00		-20,000	250,000	320,000	400,000
-41	18-09-2014 06:00		-20,000	250,000	320,000	400,000
-42	18-09-2014 18:00		-20,000	250,000	320,000	400,000
-43	19-09-2014 06:00		-20,000	250,000	320,000	400,000
-42	19-09-2014 18:00		-20,000	250,000	320,000	400,000

13. Graphs

When clicking on the “Vezi grafic” (See graph) button of an objective, the section of graphs where the graphs corresponding to the respective objectives will be uploaded is displayed in the upper right of the screen.

If a new window opens displaying the summary of details, with the option “Compară grafic” (Compare the graph), when you click a new window of graphs will open and will be displayed in parallel with the first one opened. Up to 3 graphs can be displayed simultaneously.



To close a graph, select the window close button.

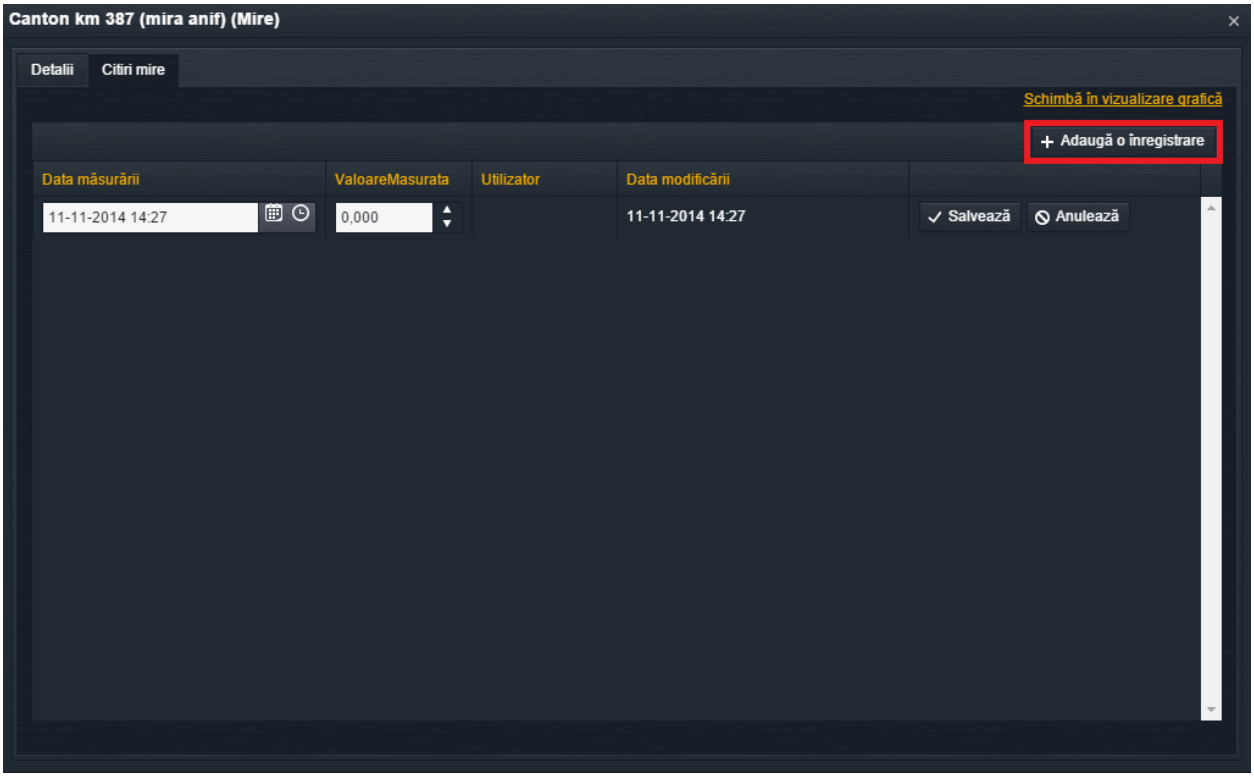
14. Managing intermediate level staffs

14.1 Entering level staff data

The system will automatically fill in the user's name and the date when the information was entered, without the possibility to change them.

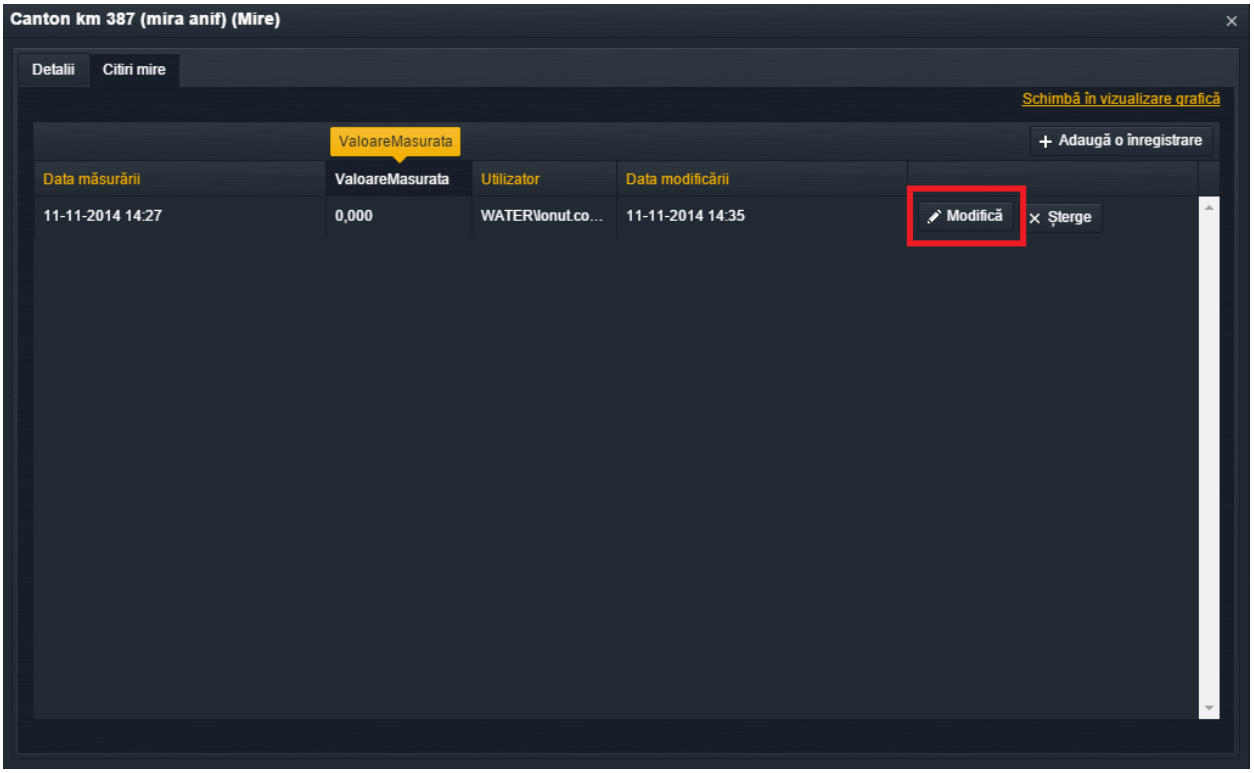
The measurement value to be entered cannot exceed the top level of the respective level staff. The measured value will be entered in the system only in numerical form, and a validation is performed in this respect.

To enter the data, open the window with the details of a level staff, access the “Citire mire” (Read level staffs) tab, the option “Schimbă în vizualizare grafică” (Change to graph view), then access the button “Adaugă o înregistrare” (Add a record), as shown in the image below:



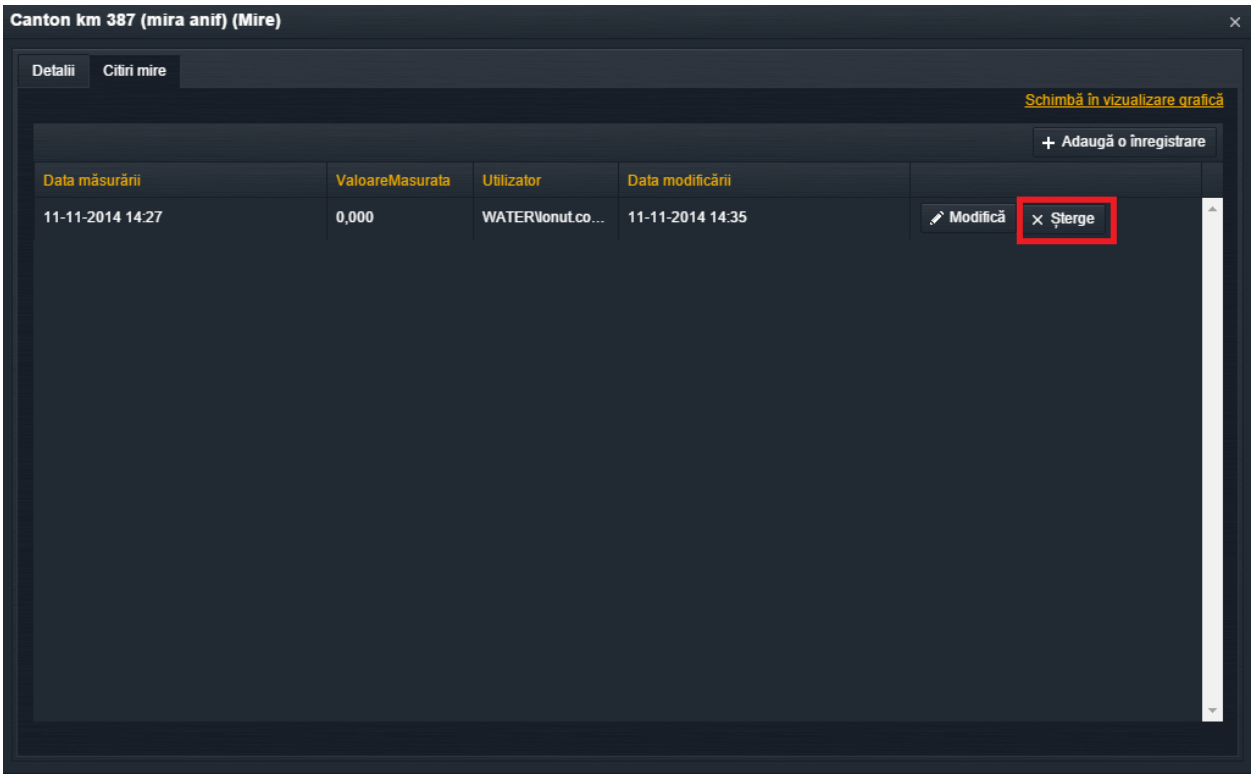
14.2 Changing the level staff data

By changing the level staff data the operator can change the values entered into the system, received from the measurement stations. To change the data of a level staff, select the “Modifică” (Change) button next to the level staff to be changed, as shown in the image below:



14.3 Deleting the level staff data

Deleting the data means the physical removal of the information received from the intermediate level staff from the system. To delete the data of a level staff, select the “Șterge” (Delete) button next to the level staff to be deleted, as shown in the image below:


Canton km 387 (mira anif) (Mire)
Detalii
Citiri mire
Schimbă în vizualizare grafică
+ Adaugă o înregistrare
Data măsurării
ValoareMasurata
Utilizator
Data modificării
11-11-2014 14:27
0,000
WATER\Ionut.co...
11-11-2014 14:35
Modifică
Șterge